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On Being a Mindful Authoritarian: Is Need for Cognition Always Associated with Less Punitiveness?

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Previous research shows that the motivation to be mindful is associated with less intolerance toward deviant and stigmatized groups. The present research examines authoritarianism as a possible moderator of this seemingly robust finding. We obtained consistent evidence from two studies that authoritarianism (right-wing authoritarianism, social dominance orientation) moderates the relationship between need for cognition and punitiveness. Among low authoritarians, need for cognition was negatively associated with punitiveness and dispositional attribution of crimes and positively associated with support for rehabilitation of criminals. However, among high authoritarians, the pattern reversed. These results are discussed in the context of some recent advances in the understanding of motivated social cognition.

KEY WORDS: Need for cognition, right-wing authoritarianism, social dominance, punitiveness, motivated social cognition

In the literature of social psychology it is often assumed that intolerance toward deviant and stigmatized groups can be moderated when people are motivated to become mindful (e.g., Devine & Monteith, 1999; Stangor & Thompson, 2002). Two studies reported in the present article examine a possible moderator of this commonly held assumption. These studies show that need for cognition, an individual difference in the motivation to be mindful, does not impact and may even strengthen intolerance toward criminals among people strongly committed to

authoritarian ideology, possibly because mindful authoritarians have developed relatively elaborate ideological structures to support their crime-related attitudes.

Need for Cognition

The need for cognition (NFC) refers to a dispositional tendency to engage in and enjoy thinking (Cacioppo & Petty, 1982). Previous studies suggested that need for cognition may moderate intolerance toward deviant and stigmatized groups. For example, higher need for cognition was found to be associated with lower levels of dogmatism (Cacioppo & Petty, 1982) and racial prejudice (Crawford, Skowronski, & Walker, 1995; cf. Crawford & Skowronski, 1998; Hogan & Mallot, 2005; Waller, 1993). In addition, Sargent (2004) reported a consistent negative association between NFC and support for punishing criminals. Apparently, this evidence supported the widely held thinking that enhancing cognitive complexity can lower intolerance toward deviant and stigmatized groups (e.g., Van Hiel, Pandelaere, & Duriez, 2004).

A closer look at the concept of NFC, however, suggests that being mindful does not always guarantee less intolerance. NFC may bolster the consistency between attitudes and social judgments (Cacioppo, Petty, Kao, & Rodriguez, 1986). Past research has shown that high (vs. low) NFC individuals, through elaborating cognitively on issue-pertinent information, may develop relatively elaborate and coherent judgments supporting their attitudes (Cacioppo et al., 1986). Consistent with this idea, Khan and Lambert (2001) found that among individuals with strong antiblack attitudes, those high in NFC tend to rationalize and exonerate antiblack practices; among those with problack attitudes, NFC is not related to such tendency. Seemingly, NFC may or may not moderate intolerance, depending on an individual's prior attitudes.

Motivated Social Cognition Perspective

Some recent advances in the understanding of motivated social cognition also suggest that being mindful does not always guarantee less intolerance. Jost and his colleagues (Jost, Glaser, Kruglanski, & Sulloway, 2003) have proposed a distinction between directional motives and nondirectional ones. The former refers to a desire for a specific conclusion (e.g., self-enhancement), and the latter a desire to arrive at a conclusion independent of its content. NFC, defined as a need to think about issues that a person confronts, is a nondirectional motive.

According to this understanding, NFC motivates an individual to consider arguments that are subjectively perceived to be pertinent and valid. However, what is seen as pertinent and valid depends in part on the perceiver's chronic functionalist mindset. The idea that deep thoughts result in tolerant judgments rests on the assumption that perceivers adopt the mindset of an intuitive scientist, whose thought processes are directed to form accurate judgments based on objective

evidence (Rucker, Polifroni, Tetlock, & Scott, 2004). However, people may have other functionalist mindsets that direct them to emulate the information processing goal of a politician, prosecutor, or theologian (Tetlock, 2002).

Of particular relevance to the present research is the functionalist mindset of an intuitive prosecutor. Intuitive prosecutors are people who “seek to defend rules and regimes that they endow with legitimacy” (Tetlock, 2002, p. 461). They are motivated by a need to see norm violators atone for what they have done. When people adopt the mindset of lay prosecutors, NFC may not moderate the tendency to be punitive. Instead, sometimes, more elaborate thoughts could lead information processing further down the alley of finding legitimate reasons for enforcing the status quo and sanctioning deviant behaviors.

The Present Research

The present research examined the joint effects of NFC and authoritarianism on punitiveness toward criminals. Authoritarianism constitutes an interesting variable because of its relevance to many social issues, in particular intolerance of deviant groups (e.g., Altemeyer, 1996; Peterson, Doty, & Winter, 1993). It has been found to be positively related to punitiveness (e.g., Lerner, Goldberg, & Tetlock, 1998). Additionally, authoritarians often act like intuitive prosecutors; they are concerned about submission to and protection of the established and legitimate norms in a society. They may punish deviants aggressively and regulate others’ behaviors with coercive means (Altemeyer, 1996). The resemblance of authoritarians to intuitive prosecutors is suggested in the following characterization of intuitive prosecutors: “Individuals whose goal is specifically to uphold the social order could be labeled intuitive prosecutors who are upset by and want to punish wrongdoers” (Goldberg, Lerner, & Tetlock, 1999, p. 790).

Based on the above analysis, we hypothesized an interaction effect between NFC and authoritarianism. Specifically, authoritarianism is expected to moderate the relationship between NFC and punitiveness toward criminals. Among individuals who disagree with authoritarian ideology, this relationship would be negative. Among authoritarians, however, this relationship would no longer be negative; it may even become positive.

Study 1

Method

The participants were 137 (43 male, 93 female, 1 with missing gender information) undergraduates recruited from a U.S. public university. Their age ranged from 17 to 23 ($M = 19.49$, $SD = 1.20$). They participated in exchange for course requirement credits.

To obscure the purpose of the study, the measures of authoritarianism and NFC were put together with some filler measures and presented to the participants as a personality study. The dependent variables were included in another questionnaire package and were mixed with other measures included in the package.

Measures

Right-wing authoritarianism (RWA). The Right-Wing Authoritarianism Scale (Altemeyer, 1996) comprises 34 items. Because the first four items overlap with the dependent measures in the current study, we excluded them from the scale. For example, one excluded item is related to life imprisonment (“Life imprisonment is justified for certain crimes”). Participants indicated their agreement with each of the remaining 30 items on a 9-point scale (from –4 “strongly disagree” to +4 “strongly agree”). Two sample items in the scale are “The real keys to the ‘good life’ are obedience, discipline, and sticking to the straight and narrow” and “Our country needs free thinkers who will have the courage to defy traditional ways, even if this upsets many people” (reverse scoring).

Following the standard scoring procedures, –4 was scored as 1, +4 as 9, and the neutral answer 0 as 5. The right-wing authoritarianism score was the mean of the recoded scores on the 30 items, with the lowest possible score of 1, and the highest possible score of 9. A higher score indicates stronger authoritarianism. The scale had high reliability in this study: $\alpha = .92$.

Need for cognition. Participants indicated how well each of the 18 items on the Need for Cognition Scale (Cacioppo, Petty, & Kao, 1984) described themselves on a 5-point scale (“1” extremely unlike me to “5” extremely like me). Two sample items of the scale are “I only think as hard as I have to” and “The notion of thinking abstractly is appealing to me.” The scale was reliable in this study: $\alpha = .89$.

Dependent measures. In this study, two dependent measures were included to assess participants’ attitudes toward punishing criminals. The first measure assessed support for punishing criminals. Specifically, it measured agreement with death penalty and a retribution orientation in punishing criminals. It consisted of five items: “In general, do you approve or disapprove of the death penalty?”; “Do you generally favor or oppose the death penalty in cases where people are convicted of first-degree murder?”; “Death penalty is cruel and inhumane.” (reverse scoring); “Criminals should be punished to make the criminals suffer, as the victims of the crimes suffered.”; and “Criminals should be punished to make the criminals pay for their crimes.” Participants responded to each of these items on a 7-point scale, with a higher number indicating greater support for punishing criminals. The internal reliability of the five items was .86.

Another dependent measure assessed participants’ support for rehabilitating criminals. Specifically, it measured support for rehabilitation programs in prisons

Table 1. Descriptive Statistics and Zero-order Correlations (Study 1)

	Mean	SD	Max	Min	1	2	3	4
1. RWA	3.77	1.19	6.57	1.77	–			
2. NFC	3.52	0.65	4.78	1.67	–0.25**	–		
3. Support for punishing criminals	4.55	1.43	7.00	1.20	0.31**	–0.10	–	
4. Support for rehabilitation	5.41	1.13	7.00	2.50	–0.12	0.16	–0.39**	–

$n = 137$. ** $p < .01$.

and a rehabilitation orientation in punishing criminals. It consisted of four items: “Do you think rehabilitation programs (including education, vocational training, and psychological counseling, etc.) in prisons are helpful for criminals?”; “In general do you approve or disapprove of expanding rehabilitation programs in prisons?”; “Criminals should be punished to educate the criminals to lead a law-abiding life.”; and “Criminals should be punished so as to rehabilitate them.” Participants responded to each of these items on a 7-point scale, with a higher number indicating greater support for rehabilitation. The internal reliability of the four items was .75.

Results and Discussion

Table 1 shows the descriptive statistics of and the zero-order correlations among the studied variables. Table 2 summarizes the results of subsequent main analyses.

Support for punishing criminals. Stepwise regression analyses were performed. In Step 1, RWA (mean-centered) and NFC (mean-centered) were entered. Only the main effect of RWA reached significance, $\beta = 0.30$, $t(134) = 3.55$, $p < .001$. In Step 2, the interaction of RWA and NFC was added. The overall R^2 of the model was .13, with a significant R^2 change of .04, $p < .05$. The main effect of RWA was significant, $\beta = 0.32$, $t(133) = 3.77$, $p < .001$. Consistent with our prediction, the interaction of RWA and NFC was significant, $\beta = 0.20$, $t(133) = 2.44$, $p < .05$.

To understand this interaction, we performed a simple slope analysis (Aiken & West, 1991). As shown in Figure 1, when RWA was low (at $-1SD$), NFC was negatively related to support for punishing criminals. However, when RWA was high (at $+1SD$), NFC was positively related to support for punishing criminals. This is consistent with our hypothesis.

Support for rehabilitation. We did a similar analysis on support for rehabilitation. In both Step 1 and Step 2, the main effects of RWA and NFC were not significant. Adding the interaction of RWA and NFC resulted in a significant R^2 change of .04, $p < .05$. The overall R^2 of the model with the interaction term was .07. Consistent with our prediction, the interaction of RWA and NFC was significant, $\beta = -.21$, $t(133) = -2.49$, $p < .05$.

Table 2. Stepwise Regression Analyses

	Study 1				Study 2			
	Support for punishing criminals		Support for rehabilitation		Support for punishing criminals		Support for rehabilitation	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1								
NFC		.10**		.03		.17***		.21***
Authoritarianism	-.03		.14		-.12		.12	
	.30***		-.08		.35***		-.41***	
								.12**
Step 2								
NFC	-.01	.04*	.12	.04*	-.13	.04*	.12	.02
Authoritarianism	.32***		-.10		.41***		-.45***	
Authoritarianism x NFC	.20*		-.21*		.21*		-.14	
								.04*
							-.05	
							.41***	
							.20*	

Authoritarianism was operationalized as RWA in Study 1, and as SDO in Study 2.

* $p < .05$, ** $p < .01$, *** $p < .001$.

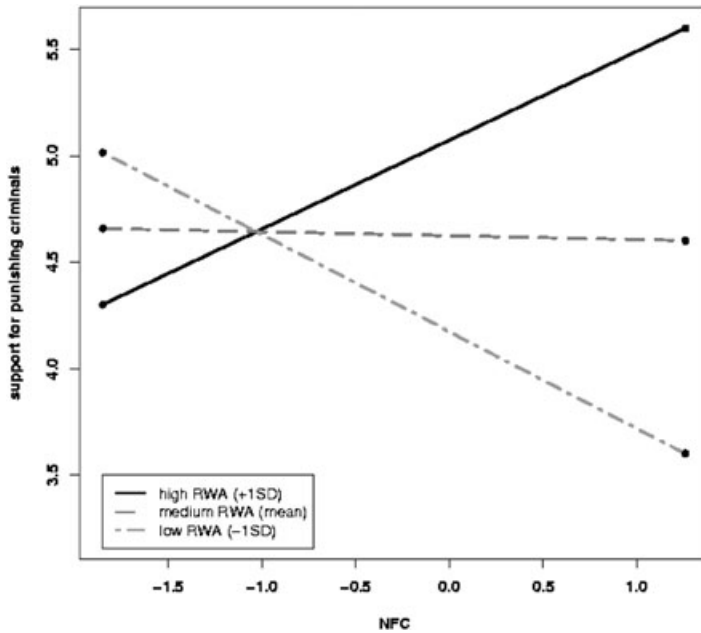


Figure 1. Interaction between Need for Cognition (NFC) and Right-wing Authoritarianism (RWA) in predicting support for punishing criminals (Study 1). NFC and RWA were mean-centered.

To understand this interaction, we performed a simple slope analysis. As shown in Figure 2, when RWA was low (at $-1SD$), NFC was positively related to support for rehabilitation; but when RWA was high (at $+1SD$), NFC was negatively related to support for rehabilitation. This is consistent with our hypothesis.

To summarize, NFC was negatively associated with support for punishing criminals and positively associated with support for rehabilitation, but only among the low authoritarians. Among high authoritarians, NFC was positively related to support for punishing criminals and negatively related to support for rehabilitation.

Study 2

The objective of Study 2 was to replicate and extend the Study 1 results using a different measure of authoritarianism. Because punitiveness is a component idea of right-wing ideology, the Study 1 results regarding support for punishing criminals may simply reflect higher levels of part-whole consistency in political ideology among high NFC individuals. To provide stronger evidence that NFC bolsters the effect of the intuitive prosecutor mindset characteristic of authoritarians, in Study 2, we measured authoritarianism with the Social Dominance Orientation Scale. Authoritarianism has been defined as the covariation of conventionalism,

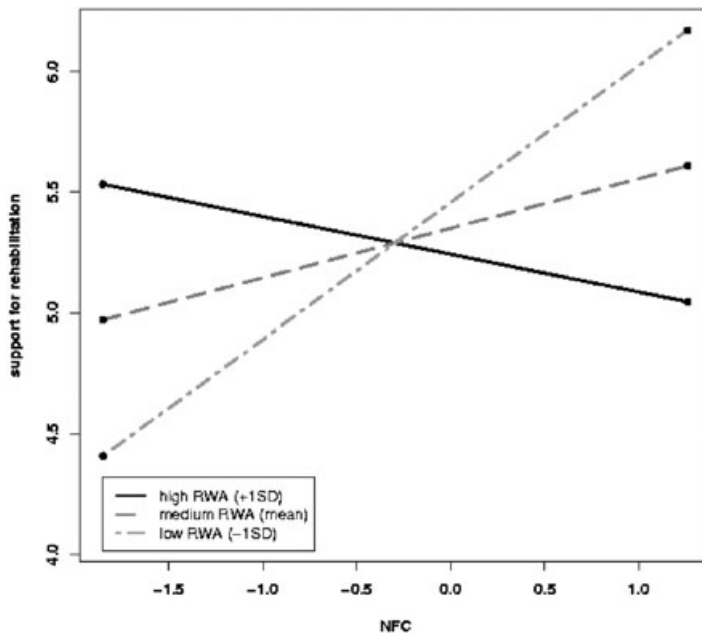


Figure 2. Interaction between Need for Cognition (NFC) and Right-wing Authoritarianism (RWA) in predicting support for rehabilitation (Study 1). NFC and RWA were mean-centered.

authoritarian submission, and authoritarian aggression. What the RWA scale measures is authoritarian submission (Altemeyer, 1998). Social Dominance Orientation (SDO) refers to “a general attitudinal orientation toward intergroup relations, reflecting whether one generally prefers such relations to be equal, versus hierarchical” (Pratto, Sidanius, Stallworth, & Malle, 1994, p. 742). Some researchers submit that SDO reflects the authoritarian dominance dimension of authoritarianism (Altemeyer, 1998; Capps, 2002). Additionally, both RWA and SDO predict intolerance against criminals (Van Hiel & Kossowska, 2006). Because punitiveness is not a component idea of SDO, the SDO moderation effects cannot be interpreted as reflecting higher levels of part-whole consistency in political attitudes among high NFC individuals.

Method

The participants were 102 (52 males, 49 females, 1 with missing gender information) undergraduates recruited from a U.S. public university. Their age ranged from 17 to 27 ($M = 19.25$, $SD = 1.35$). They participated in exchange for course requirement credits.

Table 3. Descriptive Statistics and Zero-order Correlations (Study 2)

	Mean	SD	Max	Min	1	2	3	4	5
1. SDO	2.59	1.11	6.69	1.00	–				
2. NFC	3.43	0.63	4.67	1.61	–0.34**	–			
3. Support for punishing criminals	4.74	1.31	7.00	1.00	0.39**	–0.24*	–		
4. Support for rehabilitation	5.37	0.98	7.00	1.50	–0.45**	0.26**	–0.28**	–	
5. Dispositional attribution	3.96	0.89	7.00	1.80	0.35**	–0.14	0.29**	–0.28**	–

$n = 102$. * $p < .05$, ** $p < .01$.

Measures

SDO and NFC. The Social Dominance Orientation Scale (Pratto et al., 1994) comprises 16 items. Participants indicated their attitudes towards 16 items on a 7-point scale (from 1 “very negative” to 7 “very positive”). Two sample items in the scale are “Some groups of people are simply inferior to other groups.” and “Sometimes other groups must be kept in their place.” The social dominance orientation score was the average of the scores on the 16 items, with a higher score indicating stronger social dominance orientation. The scale had high reliability in the current study: $\alpha = .94$. The Need for Cognition scale also had high reliability in the current study: $\alpha = .89$.

Dependent measures. The internal reliability of the five-item support for punishing criminals was .84, and that of the four-item support for rehabilitation measure was .68. To provide further evidence for our hypothesis, we added a new measure to assess participants’ tendency to make dispositional attributions of crimes. This new dependent measure consisted of five items: “Criminals commit crimes because they have bad character.”; “Most criminals commit crimes because they are basically selfish people, unconcerned about the feelings of other people.”; “Most criminals deliberately choose to prey on society.”; “Most criminals commit crimes because they were just born to be criminals.”; and “Most criminals know fully well what they are doing when they break the law.” Participants responded to each of these items on a 7-point scale, with a higher number indicating stronger dispositional attribution of crimes. The internal reliability of the five items was .70.

Results and Discussion

Table 3 shows the descriptive statistics of and the zero-order correlations among the studied variables.

Support for punishing criminals. Stepwise regression analyses were performed. In Step 1, SDO (mean-centered) and NFC (mean-centered) were entered. Only the main effect of SDO reached significance, $\beta = 0.35$, $t(99) = 3.63$, $p < .001$.

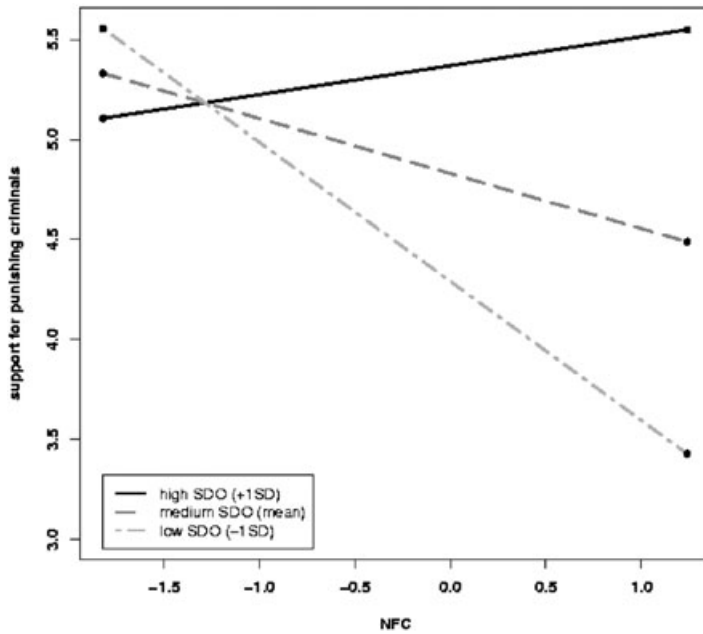


Figure 3. Interaction between Need for Cognition (NFC) and Social Dominance Orientation (SDO) in predicting support for punishing criminals (Study 2). NFC and SDO were mean-centered.

In Step 2, the interaction of SDO and NFC was added. The overall R^2 of the model was .21, with a significant R^2 change of .04, $p < .05$. The main effect of SDO was significant, $\beta = 0.41$, $t(98) = 4.16$, $p < .001$. Consistent with our prediction, the interaction of SDO and NFC was significant, $\beta = 0.21$, $t(98) = 2.19$, $p < .05$.

To understand this interaction, we performed a simple slope analysis. As shown in Figure 3, when SDO was low (at $-1SD$), NFC was negatively related to support for punishing criminals; but when SDO was high (at $+1SD$), NFC was positively related to support for punishing criminals. This is consistent with our hypothesis.

Support for rehabilitation. We did a similar analysis on support for rehabilitation. The overall R^2 of the model with the interaction term was .23. Adding the interaction of SDO and NFC did not result in a significant R^2 change. The main effect of NFC was not significant both in Step 1 and Step 2. The main effect of SDO was significant in Step 1, $\beta = -0.41$, $t(99) = -4.30$, $p < .001$, and in Step 2, $\beta = -0.45$, $t(98) = -4.58$, $p < .001$. Contrary to our prediction, the interaction of SDO and NFC was not significant, $\beta = -0.14$, $t(98) = -1.53$, $p = .13$. However, the predicted pattern was observed when we performed the simple slope analysis despite the nonsignificant interaction. As shown in Figure 4, when SDO was low (at $-1SD$), NFC was positively related to support for rehabilitation; but when SDO

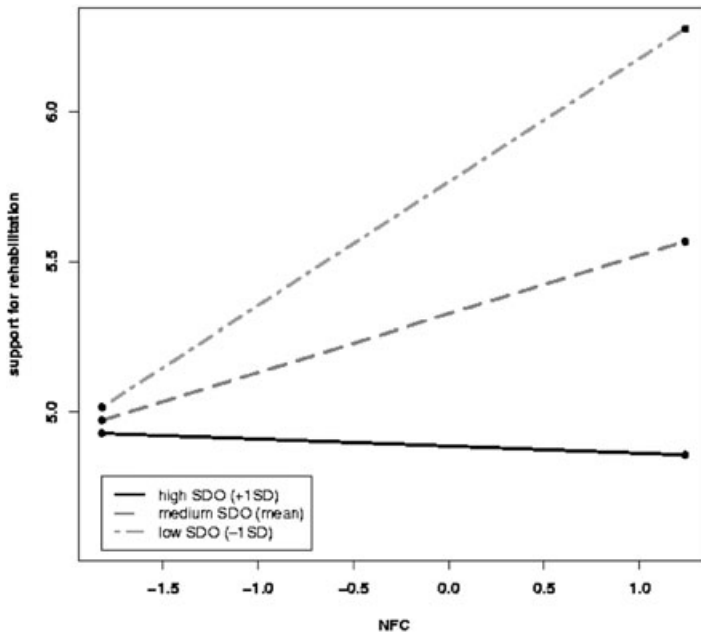


Figure 4. Interaction (non-significant) between Need for Cognition (NFC) and Social Dominance Orientation (SDO) in predicting support for rehabilitation (Study 2). NFC and SDO were mean-centered.

was high (at +1SD), NFC was not related to support for rehabilitation. This pattern, though statistically nonsignificant, is consistent with our hypothesis.

Dispositional attribution. We did a similar analysis on support for rehabilitation. In Step 1, only the main effect of SDO was significant, $\beta = 0.34$, $t(99) = 3.43$, $p < .001$. This main effect was also significant in Step 2, $\beta = 0.41$, $t(98) = 3.95$, $p < .001$. Adding the interaction of SDO and NFC resulted in a significant R^2 change of .04, $p < .05$. The overall R^2 of the model with the interaction term was .16. Consistent with our prediction, the interaction of SDO and NFC was significant, $\beta = 0.20$, $t(98) = 2.04$, $p < .05$.

To understand this interaction, we performed a simple slope analysis. As shown in Figure 5, when SDO was low (at -1SD), NFC was negatively related to dispositional attribution; but when SDO was high (at +1SD), NFC was positively related to dispositional attribution. This is again consistent with our hypothesis.

To summarize, NFC was negatively associated with support for punishing criminals and dispositional attribution of crimes, but only among participants with low SDO. Among those with high SDO, NFC was positively related to support for punishing criminals and dispositional attribution of crimes. A much weaker and statistically nonsignificant reverse pattern was observed for support for rehabilitation.

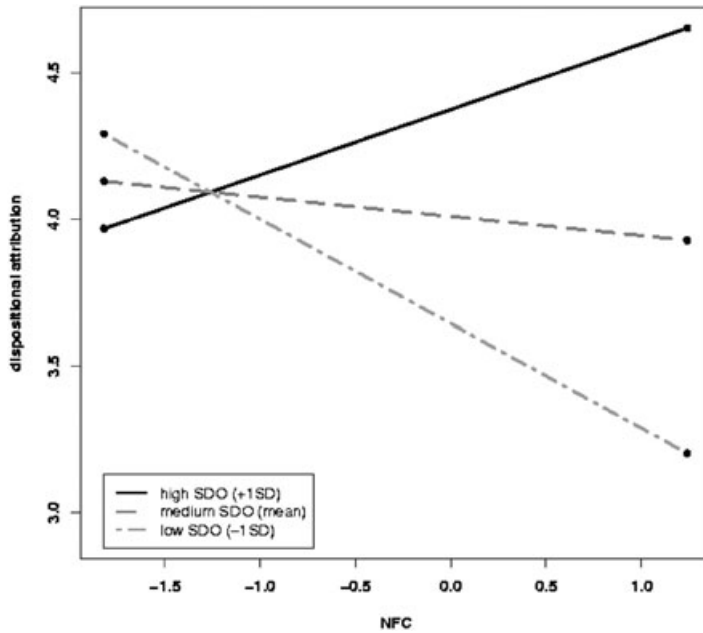


Figure 5. Interaction between Need for Cognition (NFC) and Social Dominance Orientation (SDO) in predicting dispositional attribution of crimes (Study 2). NFC and SDO were mean-centered.

General Discussion

Contrary to the common thinking that being mindful results in less intolerant judgments, the present research shows that NFC led to less punitiveness only among low authoritarians. Among high authoritarians, NFC is positively associated with punitiveness. The results for support of rehabilitation are also consistent with our hypothesis, although they are relatively weak. This is the case probably because authoritarian ideology does not strongly oppose rehabilitation of criminals.

Our results are consistent with Jost et al.'s (2003) classification of NFC and other similar epistemic motives as nondirectional motives. These motives represent a desire to arrive at a conclusion independent of what the judgment is about. As such, although NFC tends to deepen information processing, it does not guarantee greater tolerance of deviant groups. Our findings also echo Tetlock's (2002) call for attention to other possible social functionalist mindsets for understanding judgments and decision making. Tetlock (2002) argues that research on judgment and choice has been dominated by the assumption that people either function like intuitive scientists in search for accuracy and truth, or like intuitive economists in search for self-interest. He proposes three other possible cognitive

mindsets, namely, the mindset of a politician, theologian, and prosecutor. He further points out that judgments or choices considered as biases and errors within an intuitive scientist or intuitive economist mindset may seem rational within an intuitive politician, prosecutor, or theologian mindset. As indicated in our findings, authoritarians appear to have a spontaneous tendency to evoke an intuitive prosecutor's mindset that favors enforcement of conventional morality and sanctioning of deviant groups. Within this mindset, complex thoughts do not necessarily undermine the perceived validity of support for punishing deviant groups. In fact, deeper information processing may even push authoritarians to form sophisticated arguments to justify punishing these groups.

However, one may question whether we need to invoke endorsement of mindset-congruent crime-related attitudes as an explanation of our results. We contend that chronic cognisers' tendency to engage in elaborate issue-relevant thinking may increase part-whole consistency in their political attitudes and also lead to endorsement of mindset-congruent crime-related attitudes. Punitiveness is a component idea of right wing authoritarianism. Hence, the Study 1 results can be explained by NFC's effect on part-whole attitudinal consistency. However, punitiveness is not an element of the social dominance orientation. Thus, endorsement of mindset-congruent crime-related attitudes provides a better account of the SDO moderation effect in Study 2.

One apparent inconsistency between the present research and Sargent's research (2004) needs to be mentioned. Sargent (2004) reported a main effect of NFC in predicting punitiveness after controlling for the respondents' political ideology, whereas in the present research this main effect was not significant in all analyses performed. However, the discrepancy was more apparent than real. First, there was a negative correlation between NFC with support for punishing criminals in both Studies 1 and 2, and the correlation reached statistical significance in Study 2. Indeed, our Study 2 results are almost identical to the results from Sargent's large scale national survey. Specifically, the size of the zero-order correlation between NFC and punitiveness in our Study 2 ($r = -.24$, $p < .05$, $N = 102$) was comparable to that in Sargent's large-scale national survey ($r = -.22$, $N = 1807$). In addition, although in our Study 2, the association between NFC and punitiveness was not significant after controlling for authoritarianism, the standardized regression coefficient ($\beta = -.12$, $N = 102$) was identical to the corresponding coefficient obtained in Sargent's national survey ($\beta = -.12$, $N = 1807$). There is a noticeable difference in the way political ideology was measured in Sargent's national survey and our Study 2. The SDO measure in our Study 2 had high reliability ($\alpha > .90$). We also obtained a substantial correlation between NFC and SDO ($r = -.34$). Therefore, after controlling for the effect of authoritarianism, the association of NFC with punitiveness was substantially attenuated. In contrast, Sargent (2004) used one item to assess people's political ideology ("In general, when it comes to politics, where would you put yourself on the following continuum?" 1 = extremely liberal to 7 = extremely conservative). Hence this

measure's reliability cannot be determined. Given the low reliability of Sargent's single-item measure of political ideology, we expected its correlation with NFC to be relatively small (although Sargent did not report this correlation). Thus, the insignificant main effect of NFC after controlling for authoritarianism in our studies might be the results of relatively small sample sizes and higher correlations between authoritarianism and NFC.

Although the findings are generally supportive of our idea, future research is needed to establish its generality by examining the interaction of other ideological variables (e.g., conservatism, just world belief, Protestant work ethic) and other nonspecific epistemic needs (e.g., need for cognitive closure, need for structure). Also, attitudes towards various social groups (e.g., ingroup, minority groups, stigmatized groups) can be measured as well. In addition, experimental studies that induce a particular functionalist mindset and manipulate an epistemic need simultaneously would provide evidence for the causal impact of the interaction of functionalist mindsets and nonspecific information processing motives on tolerance of deviant groups, supplementing the correlational findings obtained in the present research. Finally, on-line thought processes could be measured in these experiments using the thought-listing technique to track how deeper information processing fosters generation of more ideology-consistent thoughts, which should mediate the Mindset X Epistemic Need interaction on judgments. In summary, we hope the present research can stimulate future works on the intricate relationship between ideology, information processing motives, and attitudes towards different social groups.

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